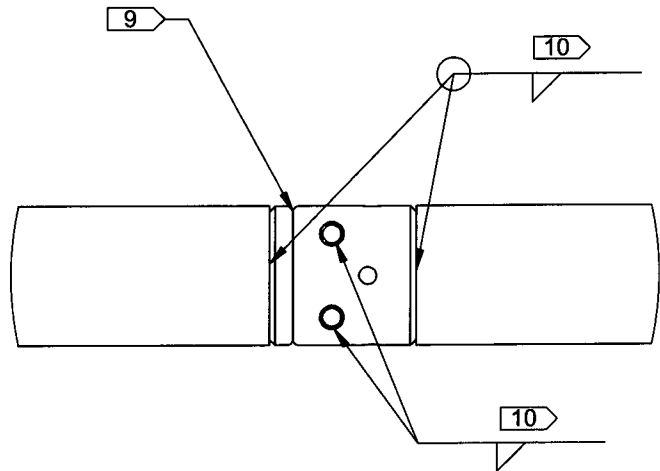
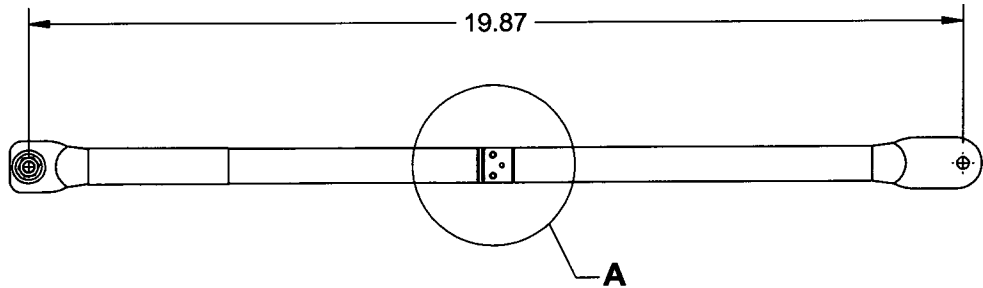
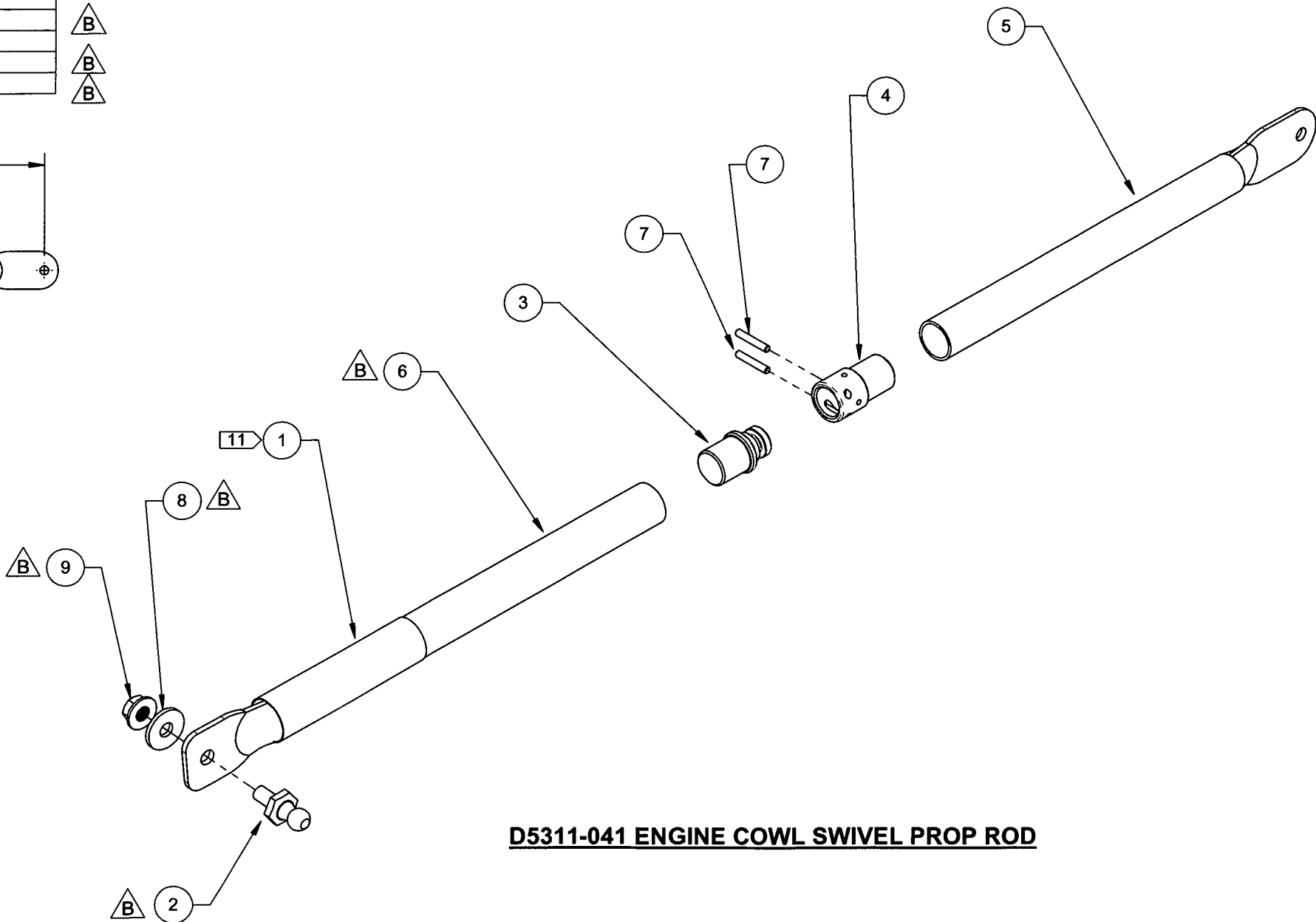


ITEM	QTY	P/N	DESCRIPTION
	X	D5311-041	ENGINE COWL SWIVEL PROP ROD ASSEMBLY
1	1	D3158-030	HEAT SHRINK TUBING
2	1	D3622-15	BALL STUD
3	1	D5311-1	SWIVEL JOINT
4	1	D5311-3	SWIVEL JOINT
5	1	D5311-5	PROP ROD
6	1	D5311-7	PROP ROD
7	2	D5317-1	DOWEL PIN
8	1	LN9016-06K	WASHER (ALT: LN9016-06L, 23111AG050LE)
9	1	LN9161-06M	NUT (ALT: ASN52320BH050N)



DETAIL A



D5311-041 ENGINE COWL SWIVEL PROP ROD

- NOTES:
- 1) MATERIAL: N/A
  - 2) FINISH: N/A
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
  - 7) WEIGHT: 0.91 lbs
  - 8) WELD PER QSI 004
  - 9) ENSURE ROD SWIVELS EASILY AFTER WELDING
  - 10) REMOVE WELDING MARKS USING ELECTROPOLISHER
  - 11) INSTALL APPROXIMATELY AS SHOWN

B	REVISED D5311-3 DIMENSIONS. ADDED D3622-15 BALL STUD, LN9161-06M NUT AND LN9016-06K WASHER. ADDED D5311-7 PROP ROD (SHEET 5).	AK	16.02.17
A	NEW ISSUE	AK	15.09.28
REV.	DESCRIPTION	BY	DATE
DESIGN	AK	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	CC	DRAWING NO. <b>D5311</b> REV. B	
MFG. APPR.	DD	SHEET 1 OF 5	
APPROVED	HS	TITLE <b>ENGINE COWL SWIVEL PROP ROD NTS</b> SCALE	
DE APPR.	DS	<small>COPYRIGHT © 2015 BY DART AEROSPACE LTD</small> <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	
DATE	16.02.17		

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2016-04-18  
EN 16-557

APPROVED

8

7

6

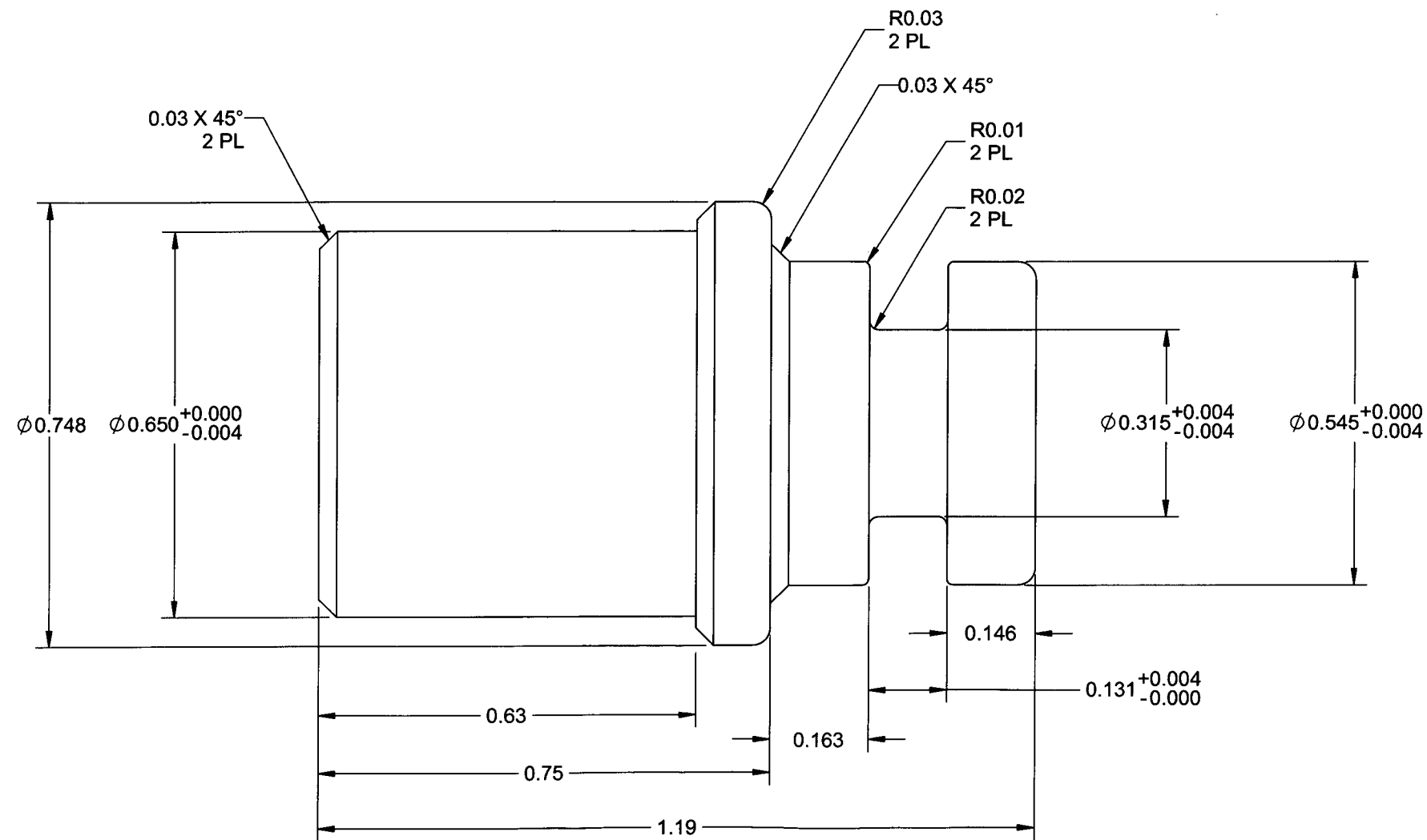
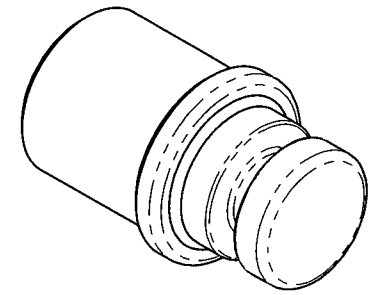
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3

2

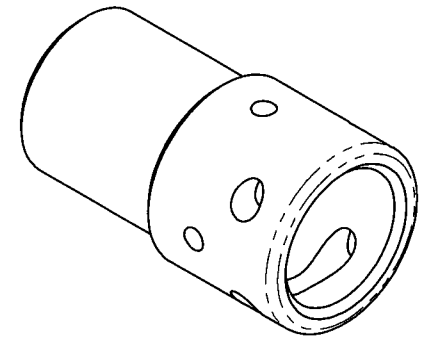
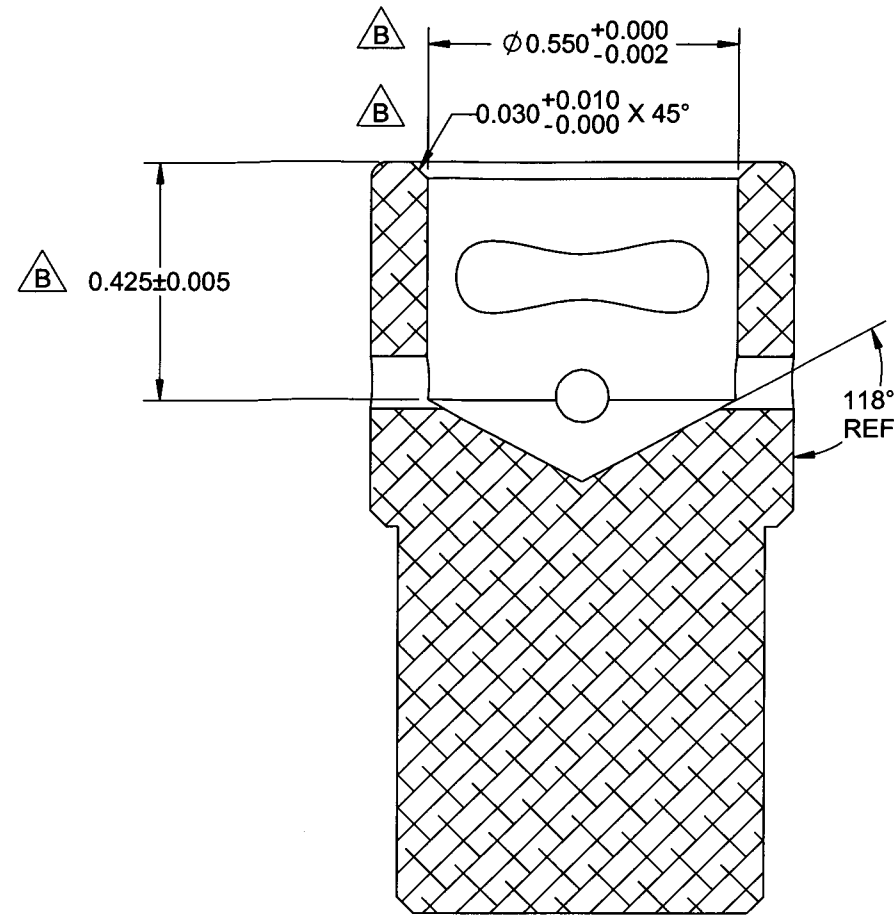
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**D5311-1 SWIVEL JOINT, INNER****NOTES:**

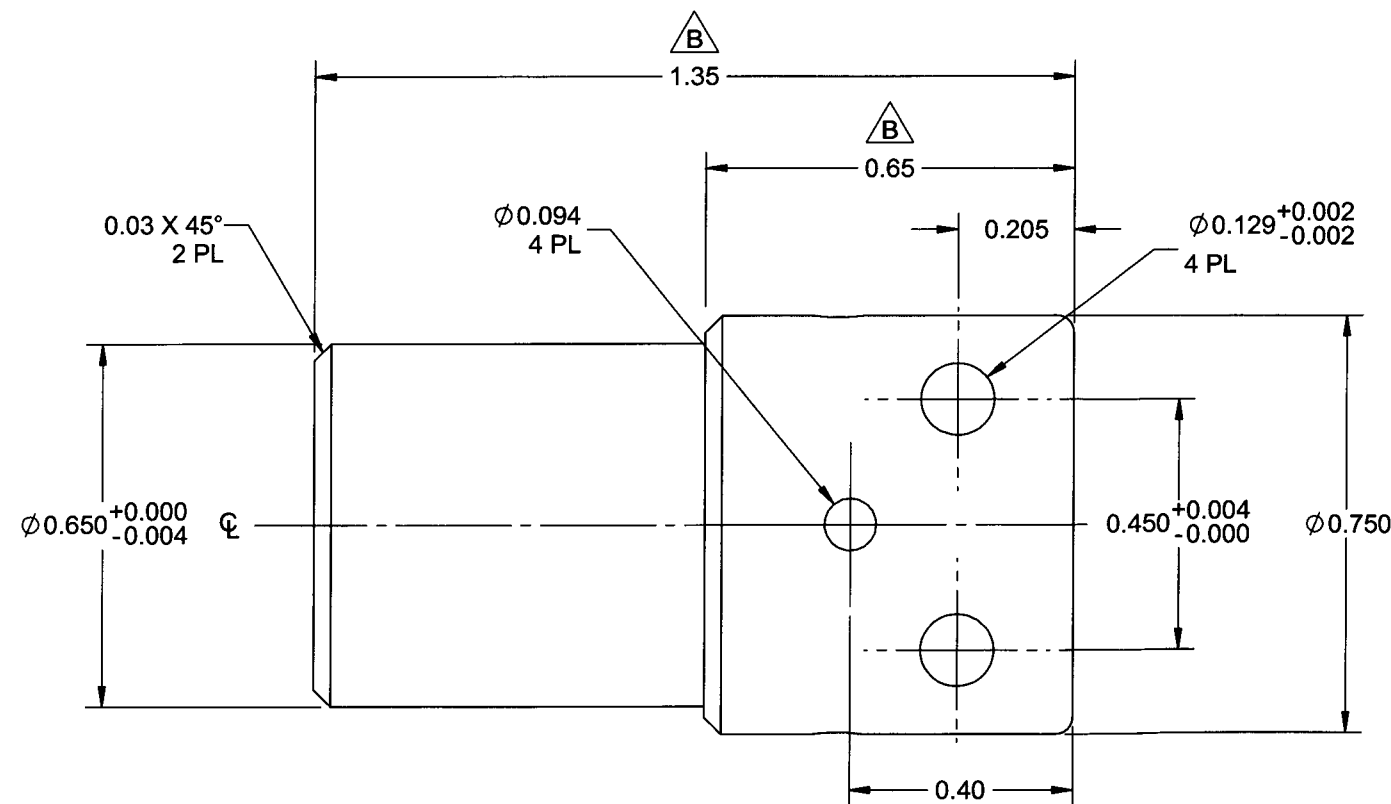
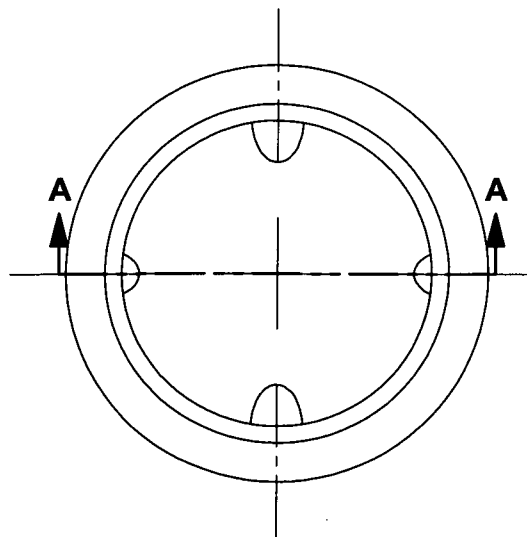
- 1) MATERIAL: AISI 304/316 SS ROUND BAR  
PER ASTM A276  
REF DART SPEC M304R
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.10 lbs

**RELEASED**  
2016-04-18**APPROVED**

DESIGN	AK	<b>DART AEROSPACE LTD</b>	
DRAWN	AK	HAWKESBURY, ONTARIO, CANADA	
CHECKED	CC	DRAWING NO.	REV. B
MFG. APPR.	DD	<b>D5311</b>	SHEET 2 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	<b>ENGINE COWL SWIVEL PROP ROD</b>	NTS
DATE	16.02.17	<b>COPYRIGHT © 2015 BY DART AEROSPACE LTD</b>	
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# **SECTION A-A**



## **NOTES:**

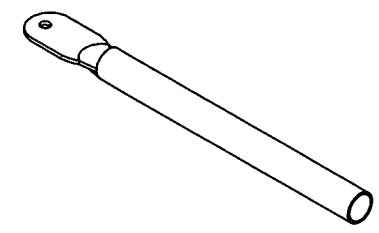
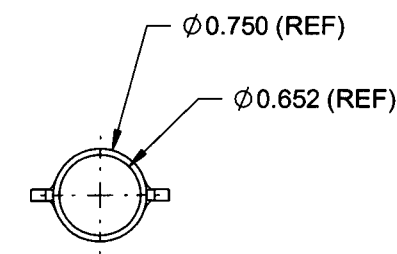
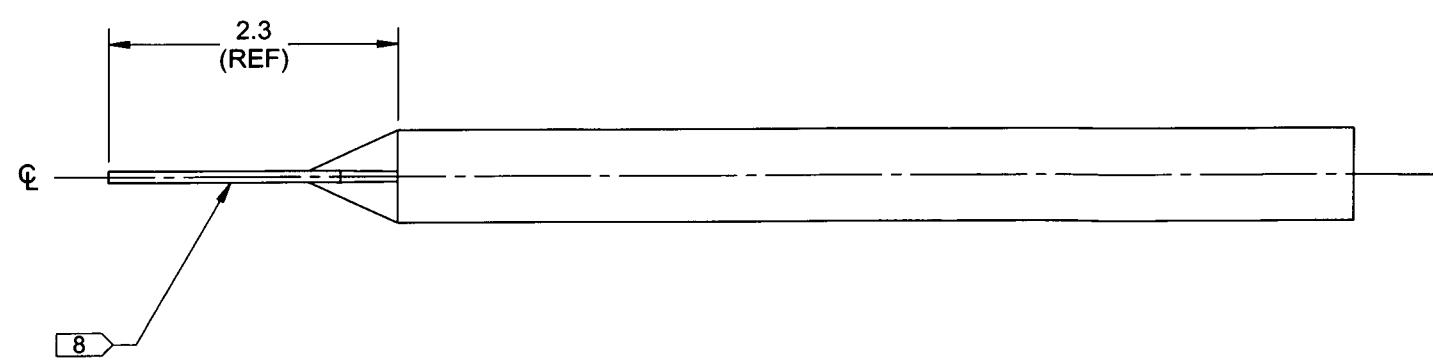
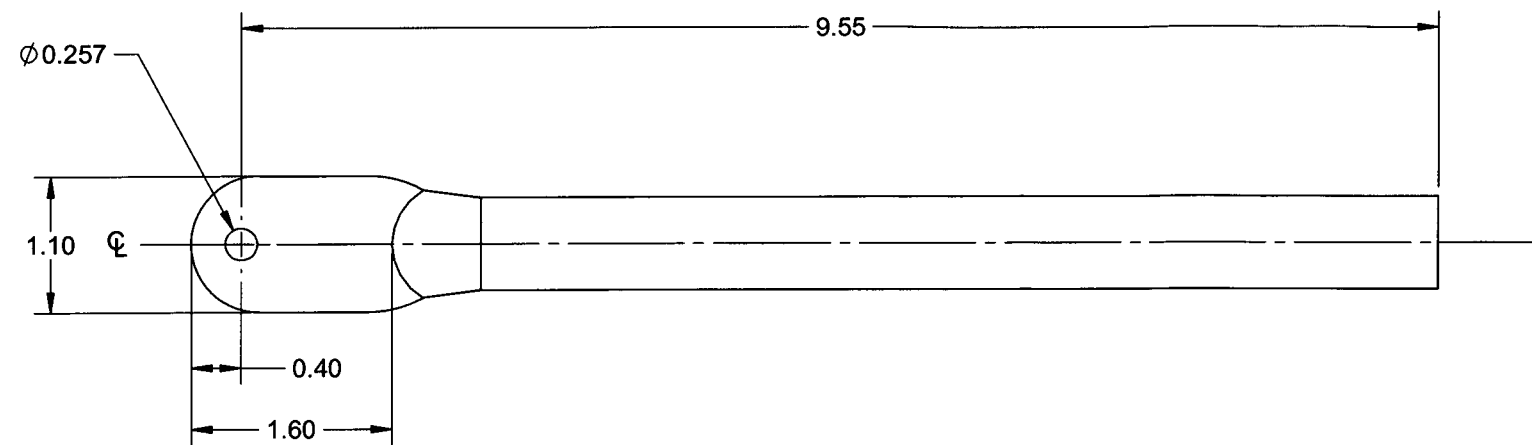
- 1) MATERIAL: AISI 304/316 SS ROUND BAR  
PER ASTM A276  
REF DART SPEC M304R
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.11 lbs

## **D5311-3 SWIVEL JOINT, OUTER**

**RELEASED**  
2016-04-18

APPROVED

DESIGN	AK	<b>DART AEROSPACE LTD</b>	
DRAWN	AK	HAWKESBURY, ONTARIO, CANADA	
CHECKED	CC	DRAWING NO.	REV. B
MFG. APPR.	DD	<b>D5311</b>	SHEET 3 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	<b>ENGINE COWL SWIVEL PROP ROD NTS</b>	
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**D5311-5 PROP ROD**

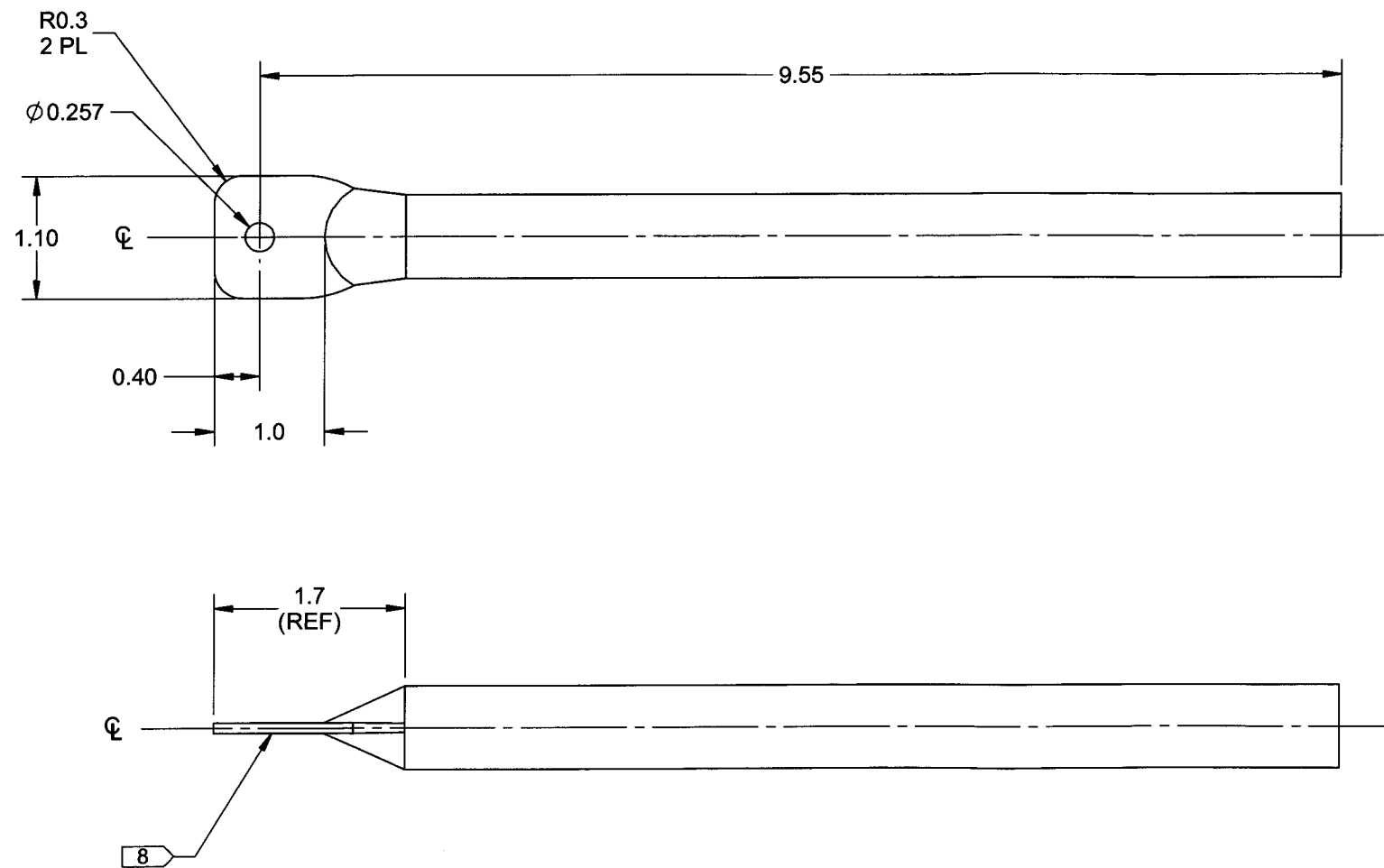
**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING  
PER ASTM A276 OR ASME SA213 OR ASTM A269  
REF DART SPEC M304TR0.750W.049
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.35 lbs
- 8) PUNCH END USING TOOL NUMBER DT8117

**RELEASED**  
2016-04-18

APPROVED  
*DS*

DESIGN	AK	<b>DART AEROSPACE LTD</b>	
DRAWN	AK	HAWKESBURY, ONTARIO, CANADA	
CHECKED	CC	DRAWING NO.	REV. B
MFG. APPR.	DD	<b>D5311</b>	SHEET 4 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	<b>ENGINE COWL SWIVEL PROP ROD</b>	<b>NTS</b>
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# **D5311-7 PROP ROD**

## **NOTES:**

- 1) MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING  
PER ASTM A276 OR ASME SA213 OR ASTM A269  
REF DART SPEC M304TR0.750W.049
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.35 lbs
- 8) PUNCH END USING TOOL NUMBER DT8117. TRIM, DRILL NEW HOLE AND FORM CORNERS AS REQUIRED

**RELEASED**  
2016-04-18

**APPROVED**

DESIGN	AK	<b>DART AEROSPACE LTD</b>	
DRAWN	AK	HAWKESBURY, ONTARIO, CANADA	
CHECKED	CC	DRAWING NO.	REV. B
MFG. APPR.	DD	<b>D5311</b>	SHEET 5 OF 5
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	<b>ENGINE COWL SWIVEL PROP ROD NTS</b>	
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